

In the Claims

1. (Currently amended) A serverless backup system for backing up information on a network including one or more servers, comprising:

a backup storage system for backing up information; and

a storage system for storing information to be backed up and restored, wherein information being backed up is transferred directly from the storage system to the backup storage system without going through a server and information being restored is transferred directly from the backup storage system to the storage system without going through the server.

2. (Original) The system as recited in Claim 1, wherein the backup storage system comprises a tape storage system.

3. (Original) The system as recited in Claim 1, wherein the storage system comprises a disk storage system.

4. (Original) The system as recited in Claim 1, wherein the network comprises a storage area network.

5. (Original) The system as recited in Claim 1, wherein the information is transferred between the backup storage system and the storage system using an Extended Copy command.

6. (Original) The system as recited in Claim 1, wherein prior to transferring information directly from the storage system to the backup storage system, a snapshot of the storage system is taken.

7. (Original) The system as recited in Claim 6, wherein a period of write inactivity to the storage system is waited for prior to taking the snapshot.

8. (Original) The system as recited in Claim 7, wherein the period of inactivity is a predefined period of time.

9. (Original) The system as recited in Claim 8, wherein the predefined period of time is three seconds.

10. (Original) The system as recited in Claim 7, wherein if the period of write inactivity does not occur by time a timeout period has expired, the transfer fails.

11. (Original) The system as recited in Claim 10, wherein the timeout period is a predefined period of time.

12. (Original) The system as recited in Claim 11, wherein the predefined period of time is 80 seconds.

13. (Original) A serverless backup method for backing up information on a network including one or more servers, comprising:

providing a backup storage system for backing up information;

providing a storage system for storing information to be backed up and restored;

backing up information by transferring information directly from the storage system to the backup storage system without going through a server; and

restoring information by transferring information directly from the backup storage system to the storage system without going through the server.

14. (Original) The method as recited in Claim 13, wherein the backup storage system comprises a tape storage system.

15. (Original) The method as recited in Claim 13, wherein the storage system comprises a disk storage system.

16. (Original) The method as recited in Claim 13, wherein the network comprises a storage area network.

17. (Original) The method as recited in Claim 13, wherein the information is transferred between the backup storage system and the storage system using an Extended Copy command.

18. (Original) The method as recited in Claim 13, further comprising taking a snapshot of the storage system prior to transferring information directly from the storage system to the backup storage system.

19. (Original) The system as recited in Claim 18, further comprising waiting for a period of write inactivity to the storage system prior to taking the snapshot.

20. (Original) The system as recited in Claim 19, wherein the period of write inactivity is a predefined period of time.

21. (Original) The system as recited in Claim 20, wherein the predefined period of time is three seconds.

22. (Original) The system as recited in Claim 19, wherein if the period of write inactivity does not occur by time a timeout period has expired, the transfer fails.

23. (Original) The system as recited in Claim 22, wherein the timeout period is predefined period of time.

24. (Original) The system as recited in Claim 23, wherein the predefined period of time is 80 seconds.

25. (Original) A computer readable medium including code for performing a serverless backup method for backing up information on a network including one or more servers, comprising:

code for backing up information by transferring information directly from a storage system to a backup storage system without going through a server; and

code for restoring information by transferring information directly from the backup storage system to the storage system without going through the server.

26. (Original) The medium as recited in Claim 25 wherein the information is transferred between the backup storage system and the storage system using an Extended Copy command.

27. (Original) The medium as recited in Claim 25, further comprising code for taking a snapshot of the storage system prior to transferring information directly from the storage system to the backup storage system.

28. (Original) The medium as recited in Claim 27, further comprising code for waiting for a period of write inactivity to the storage system prior to taking the snapshot.

29. (Original) The medium as recited in Claim 28, wherein the period of write inactivity is a predefined period of time.

30. (Original) The medium as recited in Claim 29, wherein the predefined period of time is three seconds.

31. (Original) The medium as recited in Claim 28, wherein if the period of write inactivity does not occur by time a timeout period has expired, the transfer fails.

32. (Original) The medium as recited in Claim 31, wherein the timeout period is a predefined period of time.

33. (Original) The medium as recited in Claim 32, wherein the predefined period of time is 80 seconds.

34. (Original) A serverless backup method comprising:
opening a file system root directory;
parsing the file system root directory for allocation tables of each file and finding attributes of each file;
examining the attributes of each file and determining whether a file is resident or non resident;
backing up entire attributes of a file if it is determined that the file is resident; and
backing up attributes and data blocks belonging to the file if it is determined that the file is non resident.